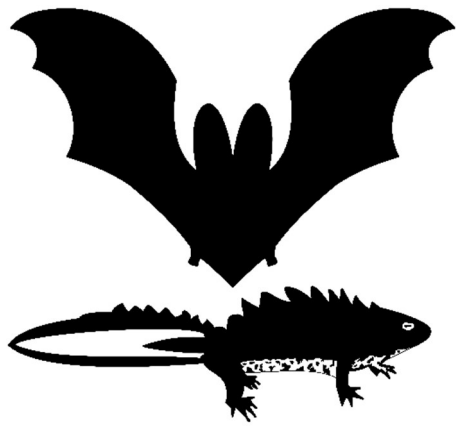




AEWC Ltd

Animal Ecology & Wildlife Consultants

Extended Phase 1 Habitat Survey

Dudley Close

**Tilehurst
Reading
Berkshire
RG31 6JJ**

Nicky Williamson

**18-032
6th February 2019**

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Summary

- AEWCLtd were commissioned by Bell Cornwell on behalf of their client to undertake an extended Phase 1 habitat survey at Dudley Close, Tilehurst, Reading, Berkshire, RG31 6JJ at grid reference SU 672744 to help inform the proposed development of the site.
- This report details the results of the survey, which was carried out on the 26th November 2018 by Nicky Williamson qualified ecologist, to record and map the phase 1 habitats present, assess the site for the potential presence of any protected species or species of conservation concern and identify habitats of conservation importance.
- Additional information regarding the present and historical ecological interest of the site and within a 1km radius for sites and 2km radius for species was provided by Thames Valley Environmental Records Centre. This helps to inform the likelihood of protected species occurring within the site boundary.
- The site is approximately 0.05ha and largely comprises of hard standing, semi-derelict garage buildings, semi-improved grassland and scrub.
- As the buildings on site have negligible potential for roosting bats no further surveys are required. However, it is recommended that immediately prior to demolition the garage buildings are inspected by a licenced ecologist and the roof/ivy is removed by hand.
- Vegetation or tree removal should be undertaken outside the breeding bird period from March to August. No vegetation can be cleared whilst a nest is occupied, regardless of species.
- The site provides a small amount of habitat for reptiles such as scrub and small areas of rough grassland. Therefore, a precautionary approach to site clearance should be adopted, vegetation should be cut down prior to site clearance. Brash and rubbish piles should be dismantled carefully (by hand if possible). Any animals caught should be relocated to a safe area of suitable habitat beyond the development boundary.
- Any retained trees should be protected in line with British Standard BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

This report has been prepared by AEWCLimited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the 'Guidelines for Preliminary Ecological Appraisal' and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

- 1.1 AEWCLtd were commissioned by Bell Cornwell on behalf of their client to undertake an extended Phase 1 habitat survey at Dudley Close, Tilehurst, Reading, Berkshire, RG31 6JJ to help inform the proposed development of the site.
- 1.2 This survey comprised a desktop study of biological records within the vicinity of the site, an ecological walkover survey to record and map the habitats present and an assessment for protected wildlife and species of conservation importance, including habitats, and was carried out by a qualified ecologist name on the 26th November 2018.
- 1.3 This report presents the results of the following:
 - Desktop Biodiversity Report
 - Phase 1 Habitat Survey
 - Protected Species Walkover Survey
- 1.4 In addition, the report outlines any recommendations/further surveys that may be necessary. This will ensure that any protected species are not detrimentally impacted by the proposed development works on site, that there is no loss of ecological viability and that the favourable conservation status of the species in the local area are not affected.

2 Background

- 2.1 The proposed development site is located at Dudley Close, Tilehurst, Reading, Berkshire, RG31 6JJ at central grid reference SU 672 744. See Figure 1.
- 2.2 Tilehurst is a suburb of Reading which is located just over 3km away to the east. Despite being in a residential area the site is close to open spaces such as Arthur Newbury park just over 100m to the north beyond Dudley Close and allotment gardens to the south of Dudley Close. There are also pockets of woodland in the locality and the river Thames is approximately 825m to the north east. See Figure 2.
- 2.3 The site is approximately 0.05ha and largely comprises of hard standing, semi-derelict garages and scrub. It is located in a residential area and is surrounded by dwellings on all sides and an electricity substation to the west of the garages. To the south of the site there is a breeze block wall approximately 1m high leading down to the rear gardens beyond. Along the driveway are 6-foot wooden panel fences and to the north of the garages the gardens have a variety of boarders, from high wooden fencing, to low wire mesh fence or planting, scrub and trees. See photograph 1.



Photograph 1: Dudley Close site, looking east.

2.4 The proposed development plans are not known at this stage but will likely involve the demolition of the garages and the complete redevelopment of the site.

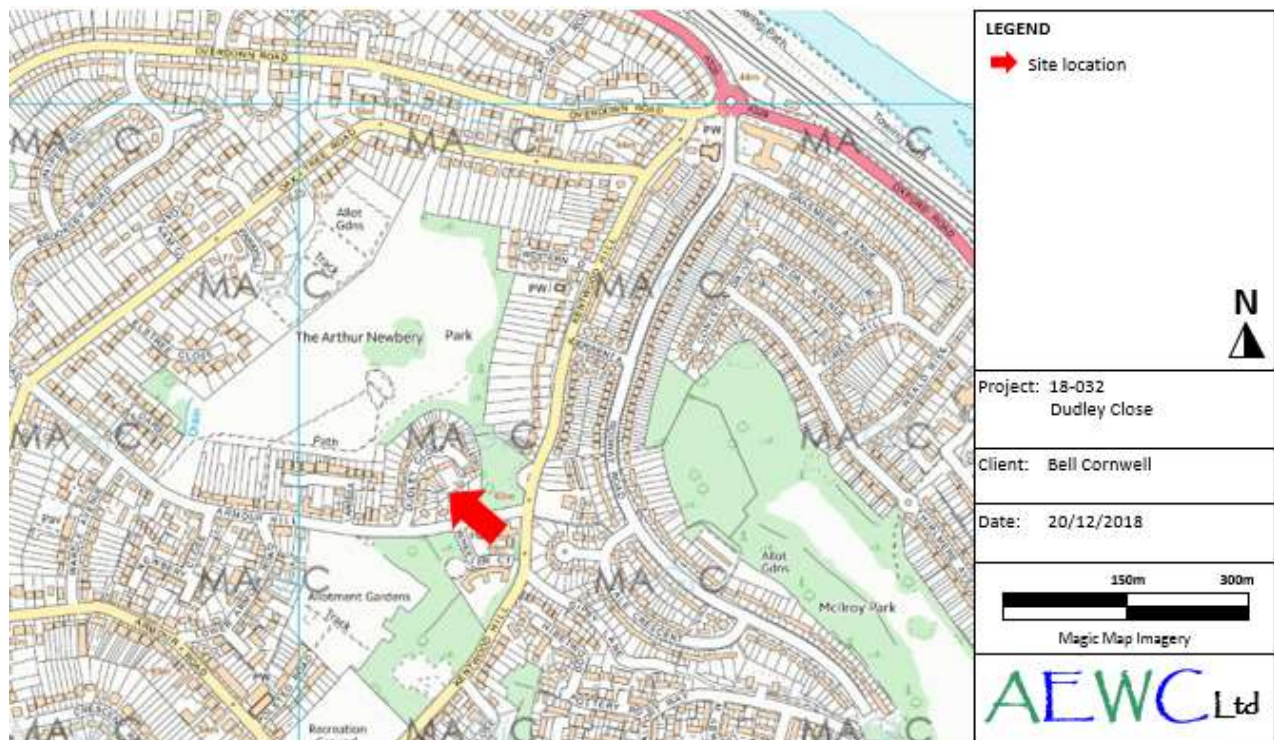


FIGURE 1: SHOWING THE SITE LOCATION



FIGURE 2 : AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY

3 Methods

Desk Study

- 3.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra) was consulted to obtain information about any international or European level designated nature conservation sites within 2km of the site boundary, afforded protection either directly by the Conservation of Habitat and Species Regulations 2010 (as amended) or to the same level of protection through planning policy (the National Planning Policy Framework and Local Development Framework). Information regarding statutory designated sites, such as Sites of Special Scientific Interest (SSSI) within a 2km radius of the site, were also obtained from MAGIC.
- 3.2 Aerial photos of the site (Google, 2017 and Bing, 2017) were examined to determine habitats surrounding the site and hence species likely to be present in order to make appropriate recommendations in the wider landscape context.
- 3.3 Records of protected and notable species within 2km of the site were requested from the local biological records centre, Thames Valley Environmental Records Centre (TVERC). Information on the presence of non-statutory designated sites within 1km of the site, were also obtained from TVERC.
- 3.4 Records were screened for relevance and age with only those from the last 10 years and of species that could occur on site considered further.
- 3.5 A search for waterbodies within 500m of the site boundary was undertaken using MAGIC mapping in order to assess their connectivity to the site.

Phase 1 Habitat Survey

- 3.6 A daytime ecological walkover assessment was carried out on the 26th November 2018 to record and map the habitats present, evaluate the site for its potential to support protected species in addition to other species of conservation importance that could be relevant in respect of planning policies.
- 3.7 The survey involved an Extended Phase 1 Habitat Survey which was carried out based on the standard methodology produced by JNCC (2010) and included searches for signs of protected species, as described in the Guidelines for Preliminary Ecological Assessment (CIEEM, 2012). This involves the following elements:
 - Habitat mapping using a set of standard colour codes to indicate habitat types on a Phase 1 Habitat Map.
 - Description of features of ecological or nature conservation interest in notes relating to numbered locations on the Phase 1 Habitat Map, called Target Notes (for habitat and features of possible interest).
 - A plant species list with subjective estimates of the relative abundance of species in selected habitat parcels using a modified DAFOR scale. The DAFOR scale ranks species according to their relative abundance in a given parcel of

land as follows: d – dominant, a – abundant, f – frequent, o – occasional, r – rare. In addition, the following prefixes are used: l – locally, v – very.

- 3.8 Plant nomenclature in this report follows Stace (2010) for native and naturalised species of vascular plant. Plant names in the text are given with the English name first, followed by the Latin name. Latin names for all species are given just once and not repeated.

Protected Species walkover

- 3.9 An assessment was made of habitat suitability in and around the site for those protected species that occur in the region. Obvious signs and incidental sightings of protected species are noted when encountered, but walkover surveys do not usually confirm species presence or absence.
- 3.10 Taking into consideration the geographical region and habitat type, species that could be encountered are:
- badger;
 - bats;
 - breeding birds;
 - great crested newt;
 - hazel dormice;
 - reptiles;
 - other mammals; and
 - other Species of Principal Importance (SPI) (e.g. hedgehog, stag beetle etc);
- 3.11 In addition, observations of any invasive species, important plant communities, plant species of note, Habitats of Principal Importance (HPI) or other valuable ecological features will be recorded and detailed.
- 3.12 Details of the initial survey method for each species are given below.
- 3.13 **Badger** – an initial assessment was carried out to identify areas that might be used by badgers (*Meles meles*). Signs of badgers including setts, incidental foraging signs, runs, hairs and latrines are recorded if encountered during the survey. Where possible the area within 30m of the site is also searched for badger setts.
- 3.14 **Bats** – The site was assessed for bat roosting potential and the surrounding area was assessed for the suitability of the habitat to support bats. Any buildings were examined and assessed for evidence of bats, such as rub marks, staining or droppings or for features that have good potential to be used by bats, such as loft voids, raised tiles, hanging tiles, gaps in soffits and lead flashing cracks, crevices and mortise joints.
- 3.15 Trees were assessed for their potential to be used by bats such as woodpecker holes, splits, cracks and crevices or loose bark plates which can be used as roost features by bats. Such features are noted and examined by using equipment such as a high-powered torch and binoculars, in order to determine their suitability for bats.

- 3.16 **Breeding Birds** - habitats were assessed for their suitability for nesting birds. This would centre on birds that favour hedgerows, areas of longer grassland, scrub, trees as well as buildings.
- 3.17 **Great Crested Newt** - initial surveys centre on identifying suitable habitat within the site. If breeding ponds are present within the locality then great crested newt (*Triturus cristatus*) could potentially be using the terrestrial habitat on the site. Maps are used to identify any ponds (that are not isolated by unsuitable habitat or physical barriers) within 500 metres of the site. A Habitat Suitability Index (HSI) is used to quantifiably assess whether a pond is suitable, this is undertaken for any onsite ponds during the walkover survey.
- 3.18 **Hazel Dormice** – scrub and areas of dense vegetation are assessed for their suitability for foraging and nesting hazel dormice (*Muscardinus avellanarius*). Favoured berry and nut bearing species such as hawthorn, hazel and bramble were looked for in particular. Additionally the connectivity of this habitat and to suitable habitat beyond the site is also assessed. If hazel nuts are present a brief search for nuts that have been chewed by hazel dormouse (i.e. displaying the characteristic smooth round hole) was conducted.
- 3.19 **Reptiles** - the site was assessed for habitat suitable for reptiles, such as long grassland and areas of scrub, with particular attention paid to those features that provide suitable basking areas (e.g. south-facing slopes and walls), hibernation sites (e.g. banks, logpiles and piles of rotting vegetation) and opportunities for foraging (e.g. rough grassland and scrub).
- 3.20 **Other mammals** – any signs of occupancy by other mammals (e.g. Rabbit warrens) are recorded.
- 3.21 **Other Species of Principal Importance (SPI)** – the habitats present on site were assessed for the likelihood of presence for species of regional and national importance.
- 3.22 **Invasive species** - Any invasive plant or animal species identified during the site walkover are recorded.
- 3.23 **Plant species of note** – Any plant species of conservation concern found on the site are recorded.
- 3.24 **Habitats of Principal Importance** - Habitats of Principal Importance within or adjacent to the site (such as arable field margins, traditional orchards, ponds, rivers, wet woodlands) are recorded.
- 3.25 **Other valuable ecological features** - Other ecological features e.g. ancient woodland, veteran trees, bird feeding stations etc, habitat enhancements etc. within or adjacent to the site are recorded.

4 Constraints/Limitations

- 4.1 An initial site assessment such as this is only able to act as a snapshot to record any flora or fauna that is present at the time of the survey. It is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.
- 4.2 The site visit was conducted in November which is outside of the optimal timeframe for undertaking Phase 1 habitat surveys, however it is considered that a sufficient assessment of the habitats and for protected species could be undertaken.

5 Results

Desk Study

Sites

Statutory Designated Sites

- 5.1 Sites of Special Scientific Interest (SSSI's) are areas notified under the Wildlife and Countryside Act 1981, as amended, as being of special interest for nature conservation. They are the finest sites for wildlife and natural features supporting many characteristic, rare and endangered species, habitats and natural features. LPAs have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI.
- 5.2 Internationally designated sites: Special Protection Areas (SPA), Special Areas of Conservation (SAC) & RAMSAR sites. Development proposals which will adversely affect these sites are not permitted (except where there are no alternative solutions and the proposal is necessary for imperative reasons of overriding public interest). If a development could possibly impact on a SPA or SAC, the applicant will need to submit an assessment of potential impacts and their significance with their planning application for the local authority to make an 'Appropriate Assessment'.
- 5.3 Local Nature Reserves are a statutory designation made by local authorities.
- 5.4 There is one statutory designated site located within 2km of the proposed site; this is West Reading Woodlands and LNR which is just under a km away to the east beyond a residential area. The next nearest statutory designated site, Sulham and Tidmarsh Woods and Meadows (SSSI), is 3km to the west of the site.

Non-statutory Designated Sites

- 5.5 Local Wildlife Sites (LWS) are non-statutory designations, which are identified at a county level. They typically form a network of sites that are recognised of being of conservation importance locally and are often included in Local Authority development plans.

- 5.6 There are three non-statutory sites located within 2km of the proposed site: Blundells Copse and the Moor, West Reading Woodland, and McIlroy Park with Round Copse. The nearest non- statutory designated site is located 300m east of site.

Ancient woodland

- 5.7 The nearest ancient woodland is located around 275m to the east of the site. The nearest woodland noted to be a habitat of principal importance (HPI) is located to the north and east of Dudley Close within 60m.

Waterbodies within 500m of the site boundary

- 5.8 There are no waterbodies that occur within 500m of the site boundary that are unobstructed by main roads (see Figure 3):

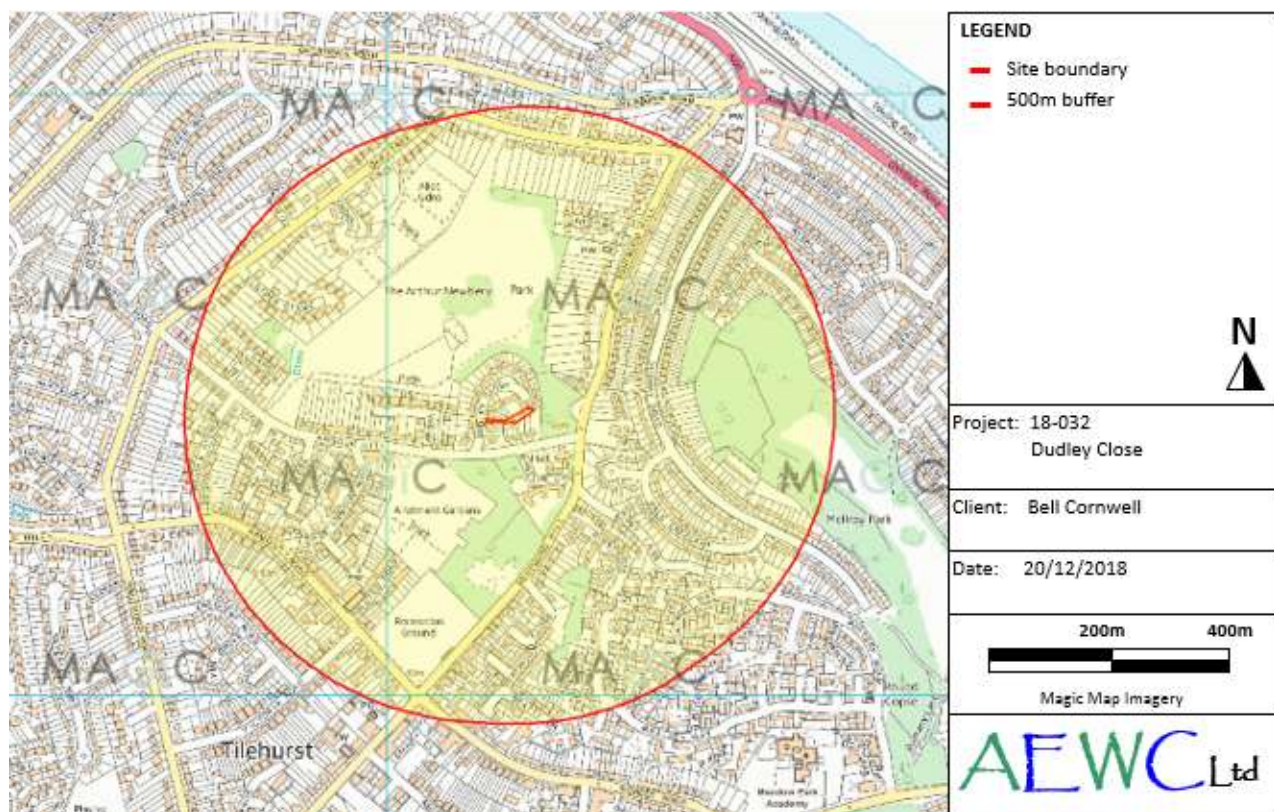


FIGURE 3: WATERBODIES WITHIN 500M

Protected Species

Badger

- 5.9 Numerous records for badger within 2km of the proposed site were identified. The most recent (2017) records are for setts 1.2km north- west and 1.8km south- west of the site.

Bats

- 5.10 The data search identified recent records of the following bats: noctule, common pipistrelle, soprano pipistrelle and brown long-eared bat.

Breeding birds

- 5.11 A number of records of birds were identified by the data search including red kite a schedule 1 species.

Great crested newt

- 5.12 No recent records (within the past 10 years) of great crested newts were found within 2km on the site. There are, however, numerous records of smooth newt and common frog within the locality.

Hazel dormice

- 5.13 No records of hazel dormouse were found within 2km on the site.

Otter

- 5.14 No records of otter were found within 2km on the site.

Reptiles

- 5.15 Thirty-one records of slow worm were identified by the data search from 2013, the closest is 200m to the south west within allotment gardens.

Water vole

- 5.16 No records of water vole were found within 2km on the site.

Other Mammals

- 5.17 The data search identified only a historical record (2008) of brown hare within the locality of site.

Other Species of Principal Importance (SPI)

- 5.18 The data search identified a record of European hedgehog (2017) 1.85km north- west of site and common toad last recorded in 2013, 1.3km north- west of site. It also identified skylark, yellowhammer, and numerous stag beetle records (most recently 2014).

Field Survey

Habitats and Plants

- 5.19 A Phase 1 Habitat map and list of target notes are included in Figure 4 and Table 1 respectively and a species list is given in Appendix 3. The habitats present on the site are described below.

Dense scrub

- 5.20 This is dense bramble (*Rubus fruticosus agg.*) running along the southern edge of the site by the walled boundary, it extends up to the height of the garages and also contains ash saplings and is impenetrable in places. See photos 2 and 3.



Photo 2: Dense scrub by garages.

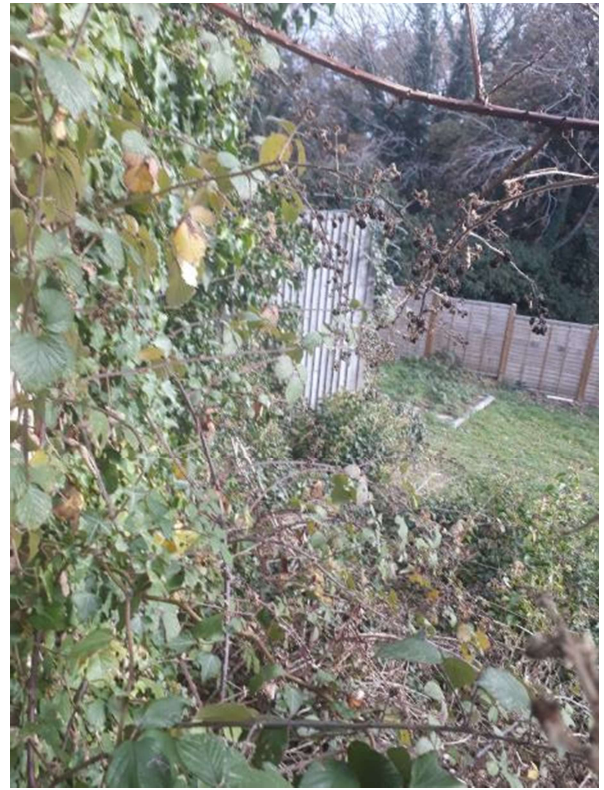


Photo 3: Dense scrub along southern boundary and adjoining rear gardens.

Scattered scrub

- 5.21 In the north east of the site there is patchy bramble scrub over the grassland in the north eastern corner of the site. See photo 4.

Scattered tree

- 5.22 This is a small immature ash (*Fraxinus excelsior*) tree and associated samplings by B2. See photo 5.



Photo 4: Scattered scrub along northern boundary.



Photo 5: Small ash by garages (B2).

Semi-improved grassland

5.23 There are three main areas of semi-improved grassland within the site. The first comprises of a narrow (approximately 30cm) strip either side of the concrete driveway in the west of the site. Here the grass is around 20cm high with abundant Yorkshire fog (*Holcus lanatus*) and rough meadow-grass (*Poa trivialis*). Common nettle (*Urtica dioica*) and white dead-nettle (*Lamium album*) are locally dominant, yarrow (*Achillea millefolium*) and ground-ivy (*Glechoma hederacea*) are frequent, smooth sow-thistle (*Sonchus oleraceus*) is locally frequent, hogweed (*Heracleum sphondylium*) occasional and rare herbs include wood avens (*Geum urbanum*), a willowherb (*Epilobium sp.*), a spurge (*Euphorbia sp.*), cleavers (*Galium aparine*) and green alkanet (*Pentaglottis sempervirens*). See photo 6.



Photo 6: Semi-improved grassland either side of concrete driveway.

- 5.24 There is a patchy strip of grassland along the edge of the rear gardens which are to the north of the site. This is similar to the above grassland except cock's-foot is frequent as are common nettle, wood avens, yarrow, ash saplings, herb Robert (*Geranium robertianum*) and dove's-foot crane's-bill (*Geranium mole*). See photo 4.
- 5.25 There is also an area of grassland between B1 and B2, this is similar to the first area of semi-improved grassland except doves-foot cranesbill is abundant to dominant.

Hard standing

- 5.26 There is a concrete block driveway running from the west of the site to the east where it widens to form the access to the garages. See photo 6. There are some grasses and herbs growing in the gaps between sections (such as annual meadow grass and ribwort plantain respectively), the dominance of which increases towards the rear (east) of the site and the edges where additional herbs such as common ragwort (*Senecio jacobaea*), ivy (*Hedera helix*), ash and hazel (*Corylus avellane*) saplings, wood avens and broad-leaved dock (*Rumex obtusifolius*) are also present. See photo 7.

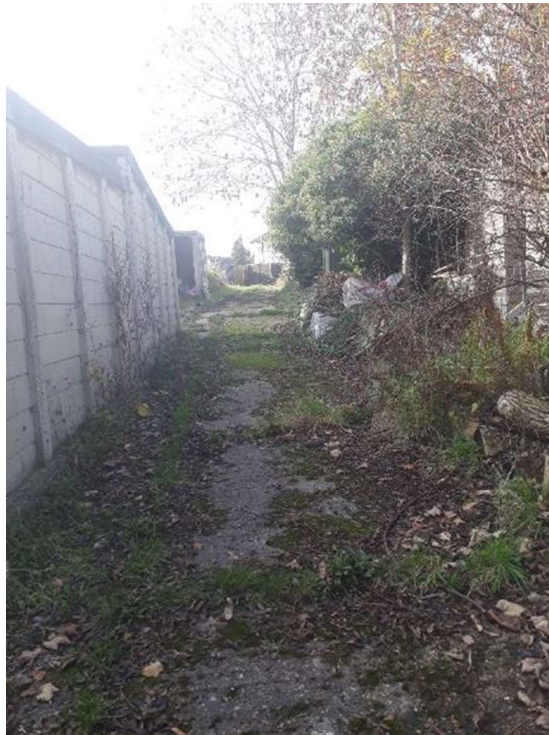


Photo 7: Hard standing concrete driveway looking west.

Tall ruderal

- 5.27 There is an earth bank approximately 1m high to the east of the garages which is dominated by common nettle. Grasses here also include Yorkshire fog and cock's-foot (*Dactylis glomerate*) with the herbs dove's-foot cranesbill, greater plantain (*Plantago major*), yarrow and shepherd's-purse (*Capsella bursa-pastoris*) all frequent and bramble being rare. See photo 8.

Buildings

5.28 There are three buildings on the site, B1 to B3 from west to east, all are blocks of garages some appear to be in use whilst others are partially derelict.

5.29 B1 comprises two single garages with prefabricated concrete walls and up and over doors with a corrugated (possibly asbestos) roof. One of the up and over doors is open and there is dense ivy growing over one side of the roof. See photo 9.

5.30 B2 is four garages similar to B1, but there is dense ivy covering the whole of the roof. Some of these garages are in a state of disrepair leading to some cracks and broken concrete in places. See photo 10.

5.31 B3 is two garages similar to those previously described. One is full of stored items and both are ivy clad. See photo 11.



Photo 8: Tall ruderal vegetation.



Photo 9: Garages B1.



Photo 10: Garages B2.



Photo 11: Garages B3.

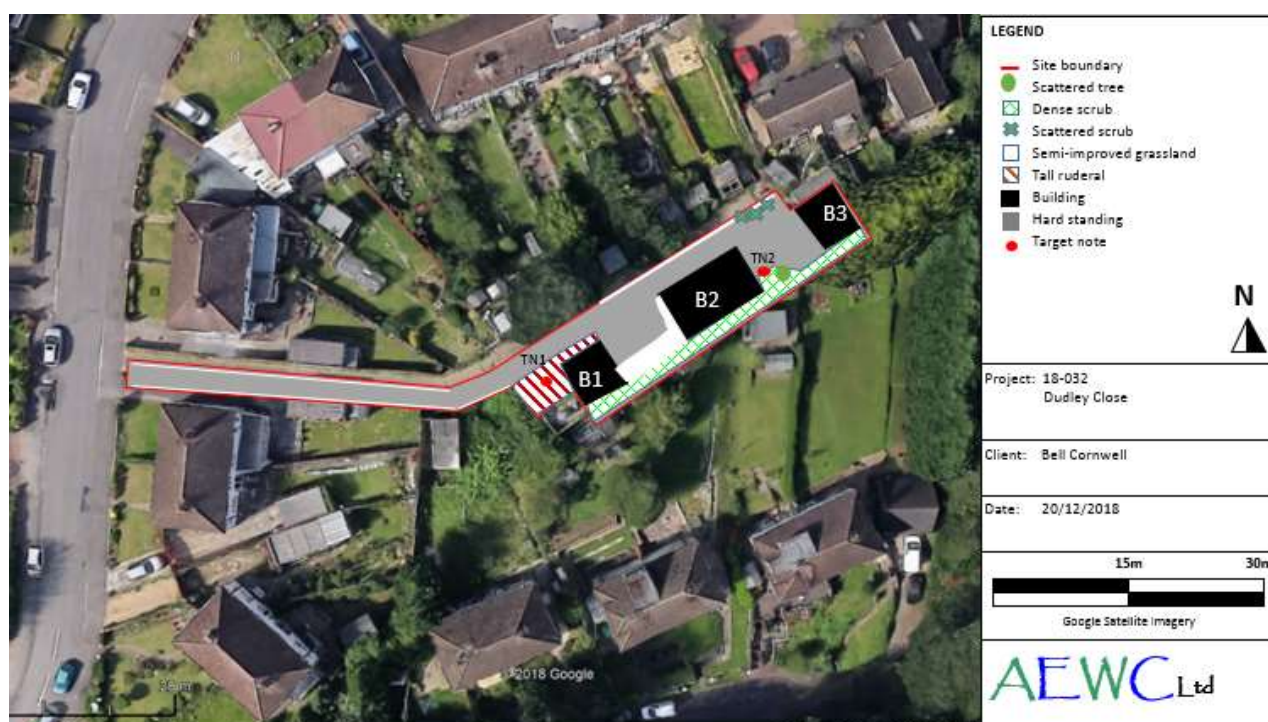


FIGURE 4: PHASE 1 HABITAT MAP

Table 1 - Target Notes from Figure 3 - Phase 1 Habitat Plan

Target Note	Description
1	This is a large brash pile within the tall ruderal habitat and against the garage (B1) comprising of twigs, branches and some rubbish. See photo 8.
2	Brash pile. See photo 12.

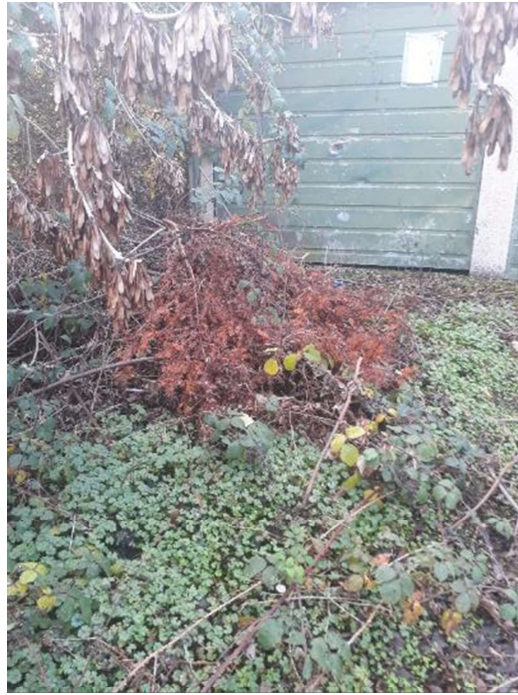


Photo 12: Brush pile (TN2).

Habitat evaluation

Plant species of note

5.36 No plant species of note were identified.

Habitats of Principal Importance

5.37 No HPI were identified within or adjacent to the site.

Protected species and species of conservation concern

Badger

5.38 No badger setts were identified present on site. No evidence of badger activity such as latrines, tracks, guard hairs or snuffle holes were observed on or directly adjacent to the site, which would suggest that the site is otherwise used for foraging.

5.39 It is considered unlikely that any badger setts are present within 30m of the site boundary as no evidence of badger activity was identified during the survey and the surrounding narrow gardens, whilst on a slope, did not appear to offer any woodland habitat suitable for a main sett.

Bats

5.40 The prefabricated garages are in a partial state of disrepair, although some are still in use for storage. These single-story buildings are not typically suitable for bats as the modern prefabricated construction typically lacks the suitable crevices used by bats as roost, they are generally open and exposed and have poor thermal retention preferred by most bats. However, there are some cracks in the concrete and dense ivy growing over the roof. The buildings are therefore considered to have negligible potential as a roost. See photos 13-16.

5.41 The scattered tree (ash) on site is immature and has negligible potential for bats. There is a large ash tree which appears to be just outside the site boundary to the

north of the driveway by B1, although the canopy extends over the site; this is considered to have negligible bat potential as it has no holes or splits and any lost limbs have healed over without leaving any holes or crevices. See photo 16.



Photo 13: Cracks in concrete and ivy.



Photo 14: Cracks in concrete beam.



Photo 15: Broken concrete beam above garage door.

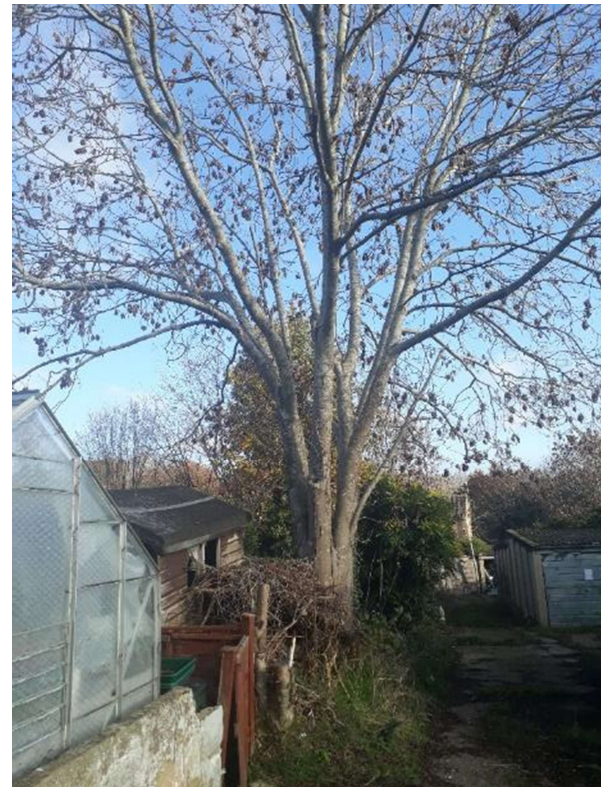


Photo 16: Ash to north of the site boundary (negligible bat potential).

Breeding birds

5.42 There is habitat suitable for breeding birds on the site, this being the scattered tree, dense scrub, dense ivy growing over the garages and the garages themselves.

Great Crested Newt (GCN)

- 5.43 The site is considered to have no potential to support terrestrial GCN, as the site is predominantly hard standing and buildings, no ponds were recorded within the site boundary and there are no ponds within 500m.

Hazel dormice

- 5.44 The site is considered to have negligible potential to support hazel dormice due to the lack of connectivity to more extensive areas of suitable habitat.

Reptiles

- 5.45 The dense scrub, tall ruderal vegetation and earth bank and the two brash piles (TN1 and TN2) on site provides some suitable habitat for common reptiles such as slow-worms, common lizards and grass snakes. However, these habitats are not extensive, and the majority of the site is hard standing and buildings.

Other Mammals

- 5.46 No evidence of other mammals were recorded within the site.

Other Species of Principal Importance

- 5.47 The site does not appear to have suitability for any other SPI.

Invasive species

- 5.48 No invasive species of note were identified.

Other valuable ecological features

- 5.49 No other valuable ecological features of note were identified on the site.

6 Conclusions & Recommendations

- 6.1 In line with Natural England's Standing Advice, where further survey for protected species is recommended these should be conducted prior to submitting a planning application and appropriate mitigation measures be incorporated into the development design.

Badger

- 6.2 The survey did not identify any evidence of badgers on the site and it is considered unlikely that there is a sett present within 30m. No further surveys for badgers are considered necessary.

Bats

- 6.3 As the buildings on site have negligible potential for roosting bats and no further surveys are required. However, as a precautionary measure it is recommended that immediately prior to demolition the garage buildings are inspected by a licenced ecologist and the roof/ivy is removed by hand.

Breeding birds

- 6.4 Vegetation or tree removal should be undertaken outside the breeding bird period from March to August. Should any vegetation clearance be scheduled to take place between the beginning of March and the end of August, this must be immediately

preceded by a survey to check for nesting birds. No vegetation can be cleared whilst a nest is occupied, regardless of species.

Great Crested Newt (GCN)

- 6.5 The site is considered unlikely to be used by GCN and therefore no further surveys for this species are required.

Hazel dormice

- 6.6 The site is considered unlikely to be used by hazel dormouse and therefore no further surveys for this species are required.

Reptiles

- 6.7 The site provides a small amount of habitat for reptiles such as scrub and small areas of rough grassland, however the areas are very small and are isolated from each other and surrounding habitat by buildings and hard standing.
- 6.8 A precautionary approach to site clearance should be adopted, vegetation should be cut down prior to site clearance. Brash and rubbish piles should be dismantled carefully (by hand if possible). Any animals caught should be relocated to a safe area of suitable habitat beyond the development boundary.

Other Mammals

- 6.9 No further action is required.

Other Species of Principal Importance

- 6.10 No further action is required.

Invasive species

- 6.11 No invasive species were recorded and therefore no further action is required.

Plant species of note

- 6.12 No plant species of note were recorded and therefore no further action is required.

Habitats of Principal Importance

- 6.13 No HPI habitat was recorded within the site.

Other valuable ecological features

- 6.14 Any retained trees should be protected in line with British Standard BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

Appendix 1 – Survey timetable

Species	Survey	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bats	Roost assessments												
	Ground level tree assess												
	Emergence and activity												
	Hibernation												
	Trapping												
	Optimal												
	Sub-optimal												
	Outside survey season												

Appendix 2 – legal protection

General

This section briefly describes the legal protection afforded to protected species. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation but summarises the salient points.

Badger

Badgers are protected under the *Protection of Badgers Act 1992*. Under this legislation it is an offence to kill or injure a badger, to damage, destroy or block access to a badger sett, or to disturb a badger in its sett. The Act also states the conditions for the protection of badger's licence requirements.

Bats

All species of bats are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species Regulations 2017*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

A roost is defined as 'any structure or place which a bat uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.

Furthermore, seven bat species (barbastelle, bechstein's, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Breeding Birds

All species of wild bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981 (as amended)*. Protection was extended by the *Countryside and Rights of Way (CROW) Act 2000*. Under the above legislation, it is an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Certain species are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981 (as amended)* and receive protection under *Sections 1(4)* and *1(5)*. There are special penalties where the offences listed above are committed for any *Schedule 1* species and it is also an offence to intentionally or recklessly:

- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or

- disturb the dependant young of any such bird.

Amphibians

Natterjack toad, northern pool frog and great crested newt are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species Regulations 2017*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Palmate newts and smooth newts are also afforded protection against sale only under *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*.

Natterjack toad, common toad, great crested newt and northern pool frog are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Hazel dormouse

Hazel dormouse is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species Regulations 2017*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Hazel dormouse is also a Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Reptiles

Common lizard (*Lacerta vivipara*), grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), and adder (*Vipera berus*) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *Countryside and Rights of Way (CROW) Act 2000*. Under the legislation, it is an offence to:

- intentionally or deliberately kill or injure any individual of these species; or
- sell or attempt to sell any part of these species either alive or dead.

Smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species Regulations 2017*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);

- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

All UK reptile species are Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Other Mammals

All mammals receive some protection under the *Wild Mammals (Protection) Act 1996*, which makes it an offence to crush or asphyxiate an animal (e.g. within its burrow).

Species and Habitats of Principal Importance

Section 41 of the *Natural Environment and Rural Communities (NERC) (2006)* requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list has 56 Habitats of Principal Importance and 943 species of principal importance listed and has been drawn up in consultation with Natural England.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under *Section 40* of the *Natural Environment and Rural Communities Act 2006*, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Invasive species

It is an offence to plant, or otherwise cause to grow in the wild non-native plant species listed under *Schedule 9* of the *Wildlife and Countryside Act 1981 (as amended)*, for which *Section 14* of the Act applies. These include, but are not limited to:

- Himalayan balsam
- Cotoneaster sp.
- Japanese knotweed
- Giant hogweed.

Ancient woodland

The *National Planning Policy Framework (2012)* states that '*Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss*'. In addition, Natural England's standing advice for ancient woodland states that *an appropriate buffer zone of semi-natural habitat [be in place] between the development and the ancient woodland (depending on the scale and impact of development), a minimum buffer should be at least 15 metres to avoid root damage and at least 50m for pollution or trampling*".

Ancient woodlands, and ancient and veteran trees, may also be protected by Tree Preservation Orders.

Appendix 3 – Species list

Common Name	Scientific name	DAFOR
Annual Meadow-grass	<i>Poa annua</i>	O
Ash	<i>Fraxinus excelsior</i>	LF
Bramble	<i>Rubus fruticosus agg.</i>	LD
Broad-leaved Dock	<i>Rumex obtusifolius</i>	O
Cleavers	<i>Galium aparine</i>	R
Cock's-foot	<i>Dactylis glomerata</i>	LF
Columbine	<i>Aquilegia vulgaris</i>	R
Common Couch	<i>Elytrigia repens</i>	LF
Common Nettle	<i>Urtica dioica</i>	LA
Common Ragwort	<i>Senecio jacobaea</i>	R
Dandelion	<i>Taraxacum officinale agg.</i>	O
Dove's-foot Crane's-bill	<i>Geranium molle</i>	LD
Greater Plantain	<i>Plantago major</i>	F
Green Alkanet	<i>Pentaglottis sempervirens</i>	O
Ground-ivy	<i>Glechoma hederacea</i>	R
Hazel	<i>Corylus avellana</i>	R
Herb Robert	<i>Geranium robertianum</i>	O
Hogweed	<i>Heracleum sphondylium</i>	R
Ivy	<i>Hedera helix</i>	LA
Ribwort Plantain	<i>Plantago lanceolata</i>	F
Rough Meadow-grass	<i>Poa trivialis</i>	LA
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	R
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	R
Spurge	<i>Euphorbia sp.</i>	R
White Dead-nettle	<i>Lamium album</i>	R
Willowherb	<i>Epilobium sp.</i>	R
Wood avens	<i>Geum urbanum</i>	F
Yarrow	<i>Achillea millefolium</i>	F
Yorkshire-fog	<i>Holcus lanatus</i>	LA

References

British Standard Institution (2013) *BS 42020:2013 Biodiversity. Code of practice for planning and development*, London, England

CIEEM (2011) *Competencies for Species Survey guidance documents*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2011) *Professional Guidance Series 10: Guidance on metadata Standards: Reporting, sharing and archiving ecological data*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2015) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2013) *Technical Guidance Series. Guidelines for Preliminary Ecological Appraisal*. Chartered Institute of Ecology and Environmental Management, Winchester

Department for Communities and Local Government (2012) *Technical Guidance to the National Planning Policy Framework*. Department of Communities and Local Government, London.

Department for Communities and Local Government (2012). *National Planning Policy Framework*. Department of Communities and Local Government, London.

JNCC (2010) *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough

ODPM (2005) *Government circular: biodiversity and geological conservation – statutory obligations and their impact within the planning system*. The Stationary Office.

Rose F. (2006) *The Wild Flower Key*. Penguin Books Ltd.

Stace C.A. (2010) *New Flora of the British Isles (3rd edition)*. Cambridge University Press.